

Title (en)  
SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, POWER STORAGE SYSTEM, POWER TOOL, AND ELECTRONIC DEVICE

Title (de)  
SEKUNDÄRBATTERIE, BATTERIEPACK, ELEKTROFAHRZEUG, ENERGIESPEICHERSYSTEM, ELEKTROWERKZEUG UND ELEKTRONISCHE VORRICHTUNG

Title (fr)  
BATTERIE SECONDAIRE, BLOC-BATTERIE, VÉHICULE ÉLECTRIQUE, SYSTÈME DE STOCKAGE D'ÉLECTRICITÉ, OUTIL ÉLECTRIQUE, ET APPAREIL ÉLECTRONIQUE

Publication  
**EP 3651241 A4 20210324 (EN)**

Application  
**EP 18828751 A 20180702**

Priority

- JP 2017130473 A 20170703
- JP 2018025045 W 20180702

Abstract (en)  
[origin: EP3651241A1] A secondary battery includes a positive electrode; a negative electrode including (A) a negative electrode current collector and a negative electrode active material layer which is provided on the negative electrode current collector and contains a negative electrode active material, in which (B) the negative electrode active material contains a carbon-containing material and a silicon-containing material, and (C) a spreading resistance distribution a/b in the negative electrode active material layer is 1.03 or more and 10 or less as measured using a scanning spreading resistance microscope; and an electrolytic solution.

IPC 8 full level  
**H01M 4/133** (2010.01); **B60L 50/64** (2019.01); **H01M 4/134** (2010.01); **H01M 4/36** (2006.01); **H01M 4/38** (2006.01); **H01M 4/587** (2010.01); **H01M 4/62** (2006.01); **H01M 10/052** (2010.01); **H01M 10/0566** (2010.01); **H01M 10/0585** (2010.01); **H01M 10/0587** (2010.01)

CPC (source: EP US)  
**B60L 50/64** (2019.01 - EP US); **H01M 4/133** (2013.01 - EP); **H01M 4/134** (2013.01 - EP); **H01M 4/364** (2013.01 - EP US); **H01M 4/386** (2013.01 - EP US); **H01M 4/587** (2013.01 - EP US); **H01M 4/62** (2013.01 - EP); **H01M 4/623** (2013.01 - EP US); **H01M 4/625** (2013.01 - US); **H01M 10/052** (2013.01 - EP); **H01M 10/0525** (2013.01 - US); **H01M 50/202** (2021.01 - EP US); **H01M 50/247** (2021.01 - EP US); **H01M 50/249** (2021.01 - EP US); **H01M 10/0566** (2013.01 - EP); **H01M 10/0585** (2013.01 - EP); **H01M 10/0587** (2013.01 - EP); **H01M 2004/021** (2013.01 - US); **H01M 2004/027** (2013.01 - US); **H01M 2220/10** (2013.01 - EP); **H01M 2220/20** (2013.01 - EP); **H01M 2220/30** (2013.01 - EP); **Y02E 60/10** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)

- [X] JP 2007080836 A 20070329 - UBE INDUSTRIES
- [X] US 2016322667 A1 20161103 - MAEDA KATSUMI [JP], et al
- [X] US 2016285101 A1 20160929 - YOSHIO SARA [JP], et al
- See references of WO 2019009239A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3651241 A1 20200513; EP 3651241 A4 20210324**; CN 110832678 A 20200221; CN 110832678 B 20221216; JP 6908113 B2 20210721; JP WO2019009239 A1 20200521; US 11329277 B2 20220510; US 2020144603 A1 20200507; WO 2019009239 A1 20190110

DOCDB simple family (application)  
**EP 18828751 A 20180702**; CN 201880044698 A 20180702; JP 2018025045 W 20180702; JP 2019527693 A 20180702; US 202016732937 A 20200102